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SPECIFICATION

1. Standard atmospheric condition :

Unless otherwise specified, the standard range of atmospheric conditions for making measurements and tests are as follows :

Ambient temperature: 5°C to 35°C

Relative humidity : 45% to 85%

Air pressure : 86kPa to 106kPa

If there is any doubt about the results, measurements shall be made within the following limits :

Ambient temperature: 20±2°C

Relative humidity : 60% to 70%

Air pressure : 86kPa to 106kPa

Operating temperature range: -20°C to 70°C

Storage temperature range : -40°C to 70°C

2. Electrical characteristics

	Item	Condition	Specifications
1	Rated voltage/ Rated current		AC 100V 1A or DC 12V 2A
2	Insulation resistance	A voltage of 500V D.C. shall be applied for 1 min. between mutually insulated metal parts after which measurement shall be made.	100 MΩ MIN.
3	Contact resistance	Measurement shall be made at with small current 1000 Hz (100mA MAX.)	30 mΩ MAX.
4	Dielectric strength	500V A.C. r.m.s (50 Hz to 60 Hz) for 1 min. Trip current : 1mA	Without damage to parts, arcing or breakdown, etc.

ISSUE	DATE	WRTN	CHKD	APVD	DESCRIPTIONS
	2003.09.09	陳樹民	龔雲輝	龔雲輝	
△x 3	2008.04.22	黃健璋	夏正雄	郭遠峰	Modify the item 4.4 and 4.5 and 4.7
△x3	2013.01.18	李阮龍	郭素玲	郭遠峰	Modify the item 4.4 Add the item 6、8
△x 0	2013.11.20	李阮龍	郭素玲	郭遠峰	Delete the factory address (P.4)

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3. Mechanical characteristics			
	Item	Condition	Specifications
1	Operating force	The insertion force and the withdrawal force shall be measured with the mating plug.	
		Insertion force	34.3N (3.5kgf) MAX.
		Withdrawal force	4.9N to 29.4N (0.5kgf to 3.0kgf)
2	Withstanding force	It shall be measured with the gauge of $\phi 1.46+0/-0.1$.	0.83N (85gf) MIN
4. Endurance characteristics			
	Item	Condition	Specifications
1	Operating endurance	The life test shall consist of 1000 cycles of insertion and withdrawal with mating plug covered with a thin coat of grease in order to prevent from heating or wearing, at a rate of 10 to 20cycles per minutes under no load.	Electrical and mechanical characteristics shall be satisfied.
		Contact resistance	50 m Ω MAX.
		Insulation resistance	10 M Ω MIN.
		Insertion force	39.2N (4kgf) MAX.
2	Humidity test	Temperature : 40°C \pm 3°C Relative humidity : 90% \pm 5% for 96 hours. The testing jack shall be left alone for 1~2 hours in a room ambient for removing dewdrops, after measurement shall be made.	Electrical and mechanical characteristics shall be satisfied.
		Insulation resistance	10 M Ω MIN.
3	Dry heat	The pin jack shall be subjected to temperature of 70°C \pm 3°C for a period of 96 hours, then shall be allowed to remain in room ambient conditions for 1~2 hours. After test, there shall be no abnormality appearance.	Electrical and mechanical characteristics shall be satisfied.

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	Item	Condition			Specifications		
4	⚠ Resistance to Soldering Heat Test	Wave soldering Process				Electrical and mechanical characteristics shall be satisfied, and not show remarkable failure.	
		Profile Feature	Pb-Free Assembly				
			Topside PCB	Padside PCB			
		Preheat -Temperature min -Temperature max -Time (ts min to max)	120°C (Ts1 max)	110°C (Ts min) 150°C (Ts max) 75 sec			
		Peak/Classification Temperature	165°C (Tp1)	260°C ±5°C (Tp)			
		Time within 5°C of actual Temperature (tp)		10 sec (within 2 times every time 2-3 sec)			
		Time 25°C to Peak temperature		3 minutes max			
		Wave Soldering Temperature Profile are as below ⚠ About the plastic properties , Please refer to the data sheet of plastic.					
	<p style="text-align: center;"> ----- Topside PCB ————— Padside PCB </p>						
	Soldering Iron Test						
Temperature of soldering Iron : 380±10°C Soldering time : 3±1 seconds				Same as Wave soldering Process			
Insertion force				34.3N (3.5kgf) MAX.			
Withdrawal force				4.9N to 29.4N (0.5kgf to 3.0kgf)			

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Item	Condition	Specifications
5 Solderability	Temperature of solder : $\triangle 250^{\circ}\text{C} \pm 5^{\circ}\text{C}$ Time of dip : 3 ± 0.5 seconds Length of dip : $2 \pm 0.5\text{mm}$ (from top of terminal)	The soldered area shall be covered a minimum of 90% of the surface being immersed.
6 Resistance to soldering flux	The terminals of DIN connector mounted on a printed circuit board($t=1.6\text{ mm}$)shall bedipped into soldering flux of GX-7(ASAHI CHEMICALS)or equivalent to preflux, and shall be immersed into molted solder.	Electrical and mechanical characteristics shall be satisfied, the contact area will then have no soldering flux left .
7 \triangle Composite temperature / humidity cyclic test	The jack board shall be subjected to 5 cycles. Then jack board shall be stored at standard atmospheric conditions for 30 minutes, after which measurement shall be made.	Dimensional requirements electrical and mechanical characteristics shall be satisfied.

$\triangle 6$. Soldering condition shelf life about 6 months depend on storage condition of humidity, temperature and others factors.

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△7. Endurance test sequence

Test group		Sample group								
NO.	Test item	A	B	C	D	E	F	G	H	I
2.2	Insulation resistance	1		1,6	1,6	1,6	1,6	1,6		1,6
2.3	Contact resistance	2		2,7	2,7	2,7	2,7	2,7		2,7
2.4	Dielectric strength	3		3	3	3	3	3		3,8
3.1	Operating force	4		4,8	4,8	4,8	4,8	4,8		4,9
3.2	Withstanding force		1							
4.1	Operating endurance			5						
4.2	Humidity Test				5					
4.3	Dry heat					5				
4.4	Resistance to Soldering Heat Test						5			
4.5	Solderability Test							5		
4.6	Resistance to soldering flux								1	
4.7	Composite temperature / humidity cyclic test									5

Test sample quality : 2 pcs / group